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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,312	09/30/2003	Hao Pan	SLA1347 (7146.0167)	8186
55648 7590 07/28/2008 KEVIN L. RUSSELL CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204				
EXAMINER KOVALICK, VINCENT E				
ART UNIT 2629		PAPER NUMBER		
MAIL DATE 07/28/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,312

Applicant(s)

PAN ET AL.

Examiner

VINCE E. KOVALICK

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 2 is/are rejected.
7) ☒ Claim(s) 3 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date See Continuation Sheet
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11/10/03, 1/16/04, 10/19/06, 10/31/06, 12/11/06 & 3/19/07.

DETAILED ACTION

Response to Amendment and RCE

1. This Office Action is in response to Applicant's Amendment dated June 9, 2008 and Request for Continued Examination (RCE) dated July 17, 2008.

- o Applicant's amendment dated June 9, 2008 has been noted and entered in the record.
- o In view of the amendment to claim 3, the 35 U.S.C. 112, second paragraph rejection set forth in USPTO Office Action dated April 17, 2008 is herewith withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3 Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya et al. (Pub. No US 2003/0006949) taken with Overdick et al. (Pub. No. 2002/0024017).

Relative to claim 1, Sekiya et al. **teaches** a Liquid Crystal Display device (pgs. 1-2, paras. 0009-0017); Sekiya et al. further **teaches** a method of modifying an image to be displayed on a display; (a) receiving at least a portion of said image; and (b) modifying said image to alternatively increase or decrease said at least one pixel's luminance output by overdriving at least one pixel of said image, for a current frame, to a current value that is selected (pgs. 1-2, paras. 0010-0011; pg. 3, paras. 0035-0036; and pg. 5, paras. 0046-0052) based upon:

at least one previously displayed luminance value of said pixel in respective ones of at least one previous frame of said image (pg. 5, para 0049).

Sekiya et al **does not teach** at least one predicted displayed luminance value of said pixel in respective ones of at least one subsequent frame of said image;

Overdick et al. **teaches** an image correction method (pg. 1, paras. 0001-0016); Overdick et al. further **teaches** at least one predicted displayed luminance value of said pixel in respective ones of at least one subsequent frame of said image (pg. 2, para. 0024).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Sekiya et al. the feature as taught by Overdick et al. in order to put in place the means to capture the pixel brightness level of the same pixel in the subsequent frame .

Regarding claim 2, Sekiya et al. further **teaches** the method step wherein said at least one previously displayed luminance value of said pixel is stored in respective frame buffers (pg. 5, para. 0049).

Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claim 2, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** the method step wherein a first said previously displayed luminance value is at a state where liquid

crystal material associated with said pixel of said display is not at an equilibrium state, and where a second said previously displayed luminance value is at a state where said liquid crystal material associated with said pixel is at an equilibrium state, and where said second said previously displayed luminance value is from the earliest said at least one frame, upon which selection of said current value is based.

Response to Applicant's Remarks

5. Applicant's argument that the Sekiya et al. reference (Pub. No. 2003/0006949) does not teach the limitation "at least one predicted displayed luminance value of said pixel in respective ones of at least one subsequent frame of said image" has merit. The Overdick et al. reference, (Pub. No. 2002/0024017), is introduced to teaches this limitation more clearly (pg. 2, para. 0024).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,293,159 Bassetti, Jr. et al.

To Respond

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINCE E. KOVALICK whose telephone number is (571)272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent E Kovalick/
Examiner, Art Unit 2629
July 24, 2008

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

